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**8-7-100 GENERAL**

**8-7-101 Description:** The purpose of this Rule is to limit emissions of organic compounds from gasoline dispensing facilities. (Amended 3/17/82, 11/30/83, 10/17/90)

**8-7-110 Exemptions**

**8-7-111 Phase I Exemptions:** The following are exempt from Section 8-7-301:

111.1 Storage tanks with an actual capacity of less than ~~1.0~~ .95 cubic meters (~~260~~ 250 gallons).

111.2 Until June 1, 2000, ~~Storage~~ storage tanks installed before October 1, 1974 at facilities with an annual gasoline throughput of less than 227 cubic meters (60,000 gallons) which were not equipped with Phase I vapor recovery as of July 1, 1983. ~~Should throughput exceed 227 cubic meters (60,000 gallons) in any one year, this exemption shall no longer apply.~~ Effective June 1, 2000, all such tanks must install Phase I vapor recovery unless exempted from Phase I requirements by Section 8-7-111.1, 111.3 or 111.4.

111.3 Storage tanks with a capacity of less than 2.2 cubic meters (550 gallons), used primarily for the fueling of implements of husbandry as defined in Division 16, Chapter 1, of the California Vehicle Code, provided such tanks are equipped with a submerged fill pipe.

111.4 Storage tanks installed before January 1, 1999 where the APCO determines in writing that Phase I vapor recovery is not feasible.

(Amended and Renumbered 11/30/83; 3/4/87; Amended 10/17/90; 6/1/94)

**8-7-112 Phase II Exemptions:** The following are exempt from Sections 8-7-302 and 313. These exemptions shall not apply to tanks equipped with Phase II vapor recovery equipment unless the Phase II equipment has been removed or otherwise decomissioned to the APCO's satisfaction.~~:~~

112.1 Facilities which are exempt from Phase I.

112.2 Delivery of fuel to vehicle tanks, of a class of vehicles where it is determined by the APCO in writing that fill-neck configuration, location or other design features of that class of vehicles makes application of the requirements of this rule inapplicable to that class of vehicles. This subsection 8-7-112.2 shall not exempt any gasoline dispensing facility from installing and using such vapor recovery systems as required by this Rule.

112.3 Dispensing of gasoline at facilities where the APCO determines in writing that Phase II vapor recovery is not feasible.

112.4 Mobile refueling and any other ~~V~~vehicle to vehicle refueling.

112.5 Tanks installed prior to March 4, 1987 at ~~f~~Facilities which exclusively refuel motor vehicle tanks with a capacity of 0.019 cubic meters (5 gallons) or less.

112.6 Facilities which exclusively refuel aircraft or marine vessels.

112.7 Tanks installed prior to March 4, 1987 at ~~f~~Facilities with an annual throughput of less than 227 cubic meters (60,000 gallons) where Phase II vapor recovery equipment was not installed prior to July 1, 1983. Should throughput exceed 227 cubic meters (60,000 gallons) in any ~~one year~~ consecutive 12-month period, this exemption shall no longer apply.

112.8 ~~112.8 Deleted March 4, 1987~~

112.9 Facilities which can demonstrate to the APCO that at least 90% of the vehicles refueled at the facility in any (time period) are owned by a common operator and equipped with onboard refueling vapor recovery (ORVR).

(Amended and Renumbered 11/30/83; 3/4/87; Amended 10/17/90; 6/1/94)

**8-7-113** **Tank Gauging and Inspection Exemption:** Any tank may be opened for gauging or inspection when loading operations are not in progress provided that such tank is not pressurized. (Adopted November 30, 1983)

**8-7-114** **Stationary Tank Testing Exemption:** The requirements of 8-7-301 do not apply to deliveries made to completely fill stationary tanks for the purpose of tank integrity leak testing, provided that such deliveries do not exceed 3.8 cubic meters (1000 gallons) at each facility. (Adopted November 30, 1983)

**8-7-115** **Exemption, Hold Open Latch**: The requirements of Section 8-7-314 shall not apply to nozzles which primarily refuel marine vessels or aircraft, or in areas where prohibited by the local fire marshal.

**8-7-200 DEFINITIONS**

**8-7-201** **CARB Certified Vapor Recovery System:** A vapor recovery system which has been certified by the California ~~State~~ Air Resources Board (CARB) pursuant to Section 41954 of the California Health and Safety Code.
(Adopted November 30, 1983, Amended October 17, 1990)

**8-7-202** **Gasoline:** Motor fuel containing any petroleum distillate where the Reid vapor pressure of the fuel is greater than 4.0 pounds.
(Adopted November 30, 1983, Amended October 17, 1990)

**8-7-203** **Leak Free:** A liquid leak of no greater than three drops per minute.
(Adopted November 30, 1983, Amended October 17, 1990)

**8-7-204** **Phase I:** Gasoline vapor recovery during transfer of gasoline between any gasoline cargo tank ~~into~~ and any stationary tanks at dispensing facilities.
(Adopted November 30, 1983, Amended October 17, 1990)

**8-7-205** **Phase II:** Gasoline vapor recovery during motor vehicle refueling operations from stationary tanks at gasoline dispensing facilities. (Adopted November 30, 1983)

**8-7-206** **Vapor Tight:** ~~Any~~ one of the following applicable criteria:

206.1 A leak of less than 100 percent of the lower explosive limit on a combustible gas detector measured at a distance of 2.5 cm (1 inch) from the source; or

206.2 No visible evidence of air entrainment in the sight glasses of liquid delivery hoses or bubbling of applied soap solution;~~.~~ or

206.3 Absence of a~~A~~ leak as determined by the Manual of Procedures, Volume IV, ST-30.

(Adopted 11/30/83; Deleted and Amended 3/4/87; Amended 10/17/90; 6/1/94)

**8-7-207** **Submerged Fill Pipe:** Any discharge pipe or nozzle which meets either of the following conditions:

207.1 Where the tank is filled from the top, the end of the discharge pipe or nozzle must be totally submerged when the liquid level is 15 cm (6 inches) from the bottom of the tank.

207.2 Where the tank is filled from the side, the discharge pipe or nozzle must be totally submerged when the liquid level is 46 centimeters (18 inches) from the bottom of the tank. (Adopted November 30, 1983)

**8-7-208** **Top Off:** ~~To~~ Any attempt to dispense gasoline to a ~~motor vehicle~~ fuel tank after a vapor recovery dispensing nozzle has shut off ~~automatically~~ due to a high fuel level. ~~The filling of those vehicle tanks which, because of the nature and configuration of the fill pipe, causes premature shut off of the dispensing nozzle, and which are filled only after the seal between the fill pipe and the nozzle is broken, shall not be considered topping off.~~
(Renumbered November 30, 1983)

**8-7-209** **Gasoline Dispensing Facility (GDF):** Any stationary ~~facility~~ operation which dispenses gasoline directly into the fuel tanks of motor vehicles. This facility shall be treated as a single source which includes all necessary equipment for the exclusive

use of the facility, such as nozzles, dispensers, pumps, vapor return lines, plumbing and storage tanks.

(Adopted March 4, 1987)

**8-7-210** **Fuel Tank:** Any container from which gasoline is directly removed for the operation of an engine.

**8-7-211** **Gasoline Cargo Tank:** Any mobile container, including associated pipes and fittings, that is used for the transportation of gasoline and would be required to be certified in accordance with Section 41962 of the California Health and Safety Code if used to transport gasoline on a highway.

**8-7-212** **Pseudo-Spillage:** Liquid gasoline remaining in the nozzle/hose assembly on the atmospheric side of the vapor check valve after a refueling event.

**8-7-213** **Spitting:** Liquid gasoline released from a nozzle when the trigger is depressed without the dispenser being activated.

**8-7-214** **Hold Open Latch:** A certified device which is an integral part of the nozzle and is manufactured specifically for the purpose of dispensing gasoline without requiring the consumer's continued physical contact with the nozzle during a refueling event.

**8-7-215** **Stationary Tank:** Any non-mobile container used for the storage or distribution of gasoline.

**8-7-216** **Motor Vehicle:** For the purposes of this rule, all vehicles defined as motor vehicles in Section 415 of the California Motor Vehicle Code plus self propelled mobile equipment, marine vessels, and aircraft.

**8-7-217** **Balance System:** A Phase II vapor recovery system operating on the principle of vapor displacement.

**8-7-218** **Vacuum-Assist System:** A Phase II vapor recovery system utilizing a vacuum producing device such as, but not limited to, a compressor or turbine to create a vacuum during gasoline dispensing to capture vapors.

**8-7-219** **Retail Gasoline Dispensing Facility:** Any gasoline dispensing facility subject to the payment of California sales tax for the sale of gasoline to the public. All other GDFs shall be considered non-retail.

**8-7-220** **Mobile Refueler:** A tank truck or trailer transporting gasoline in an onboard storage tank and dispensing it directly into any motor vehicle fuel tank.

**8-7-221** **On-Board Refueling Vapor Recovery (ORVR):** A vehicle-based system of recovering gasoline vapors during refueling pursuant to 40 CFR Parts 86, 88, and 600.

**8-7-222** **Insertion Interlock:** A CARB-certified mechanism that is an integral part of a bellows-equipped dispensing nozzle that prohibits the dispensing of fuel unless the bellows is compressed.

**8-7-300 STANDARDS**

**8-7-301** **Phase I Requirements:** A person subject to ~~Phase I vapor recovery requirements~~ this section shall comply with all of the following requirements:

301.1 A person shall not transfer or allow the transfer of gasoline ~~into~~ between a cargo tank or mobile refueler and a stationary tank~~s~~ at a gasoline dispensing facility unless a CARB certified Phase I vapor recovery system is used during each gasoline transfer.

301.2 All Phase I vapor recovery systems at gasoline dispensing facilities shall be installed as per the most recent CARB certifications and shall ~~recover at least 95% of gasoline vapors~~ meet the emission limitations of the applicable CARB certification. This standard shall apply to each stationary tank during each bulk gasoline delivery.

301.3 All Phase I vapor recovery systems shall be equipped with a submerged fill pipe.

301.4 ~~Effective July 1, 1991, all open vent pipes on stationary tanks at gasoline dispensing facilities shall be equipped with pressure-vacuum relief valves. Pressure relief shall be set between 1 and 3 inches water column.~~

301.5 All Phase I vapor recovery equipment shall be maintained to be properly operating ~~–~~as specified by the manufacturer and/or the applicable CARB Executive Order.

301.6 All Phase I vapor recovery equipment except pressure-vacuum relief valves and components with an allowable leak rate shall be maintained to be leak-free and vapor tight.

301.7 ~~Effective July 1, 1991, A~~all Phase I vapor recovery systems shall have a CARB certified poppetted drybreak or other certified poppeted fitting on the vapor return.

301.8 Effective June 1, 2000 no coaxial Phase I systems certified by CARB prior to January 1, 1994 may be installed on new or modified tanks.

301.9 Effective June 1, 2000, all new Phase I systems must be equipped with a CARB-certified anti-rotational coupler.

301.10 Effective June 1, 2000, and at least six months after CARB has certified at least two systems, a person shall not install or modify a Phase I vapor recovery system unless all new equipment has been certified by CARB to recover at least 98% of the gasoline vapors.

301.11 Effective June 1, 2000, no person shall install or operate a spill-box equipped with a drain valve on the vapor pipe of a two-point Phase I system unless the drain valve has been permanently plugged.

(Adopted November 30, 1983; Amended October 17, 1990)

**8-7-302 Phase II Requirements:** A person subject to ~~Phase II vapor recovery requirements~~ this section shall comply with all of the following requirements:

302.1 A person shall not transfer or allow the transfer of gasoline from stationary tanks into motor vehicle fuel tanks at a gasoline dispensing facility unless a CARB certified Phase II vapor recovery system is used during each transfer.

302.2 All Phase II vapor recovery systems shall be maintained as per the most recent CARB certifications and the manufacturer's specifications.

302.3 All Phase II vapor recovery equipment shall be maintained to be properly operating as specified by the manufacturer and the applicable CARB Executive Order and ~~substantially~~ free of defects ~~pursuant to~~ as defined in Section 41960.2(c) of the California Health and Safety Code.

302.4 Any component identified as defective but that does not substantially impair the effectiveness of the Phase II vapor recovery system pursuant to Section 41960.2 (e) of the California Health and Safety Code shall be repaired or replaced within seven days.

302.5 All Phase II vapor recovery equipment shall be maintained to be leak-free and vapor tight. This requirement shall not apply to components with an allowable leak rate or at the nozzle/fill-pipe interface.

(Adopted 11/30/83; Amended 10/17/90)

302.6 Effective June 1, 2000, all bellows-equipped vapor recovery nozzles shall be equipped with an insertion interlock.

302.7 Effective June 1, 2000, no person shall install or operate a vapor recovery nozzle on a balance system unless the nozzle is equipped with a built-in vapor check valve. Remote vapor check valves may not be used in conjunction with nozzles with built-in vapor check valves.

302.8 All liquid removal devices required by CARB Executive Order shall achieve a minimum liquid removal rate of at least 5 milliliters per gallon dispensed. This standard shall apply at dispensing rates exceeding 5 gallons per minute, or as otherwise specified in the applicable Executive Order.

302.9 Effective June 1, 2000, a person shall not install or operate a vapor recovery nozzle unless it is equipped with a coaxial hose.

302.10 Effective June 1, 2000, a person shall not install or operate a gasoline dispenser at a gasoline dispensing facility unless the connection between the riser and the dispenser cabinet is constructed from either galvanized piping or flexible tubing that is listed for use with gasoline. The nominal internal diameter of this connector shall not be less than 1 inch.

302.11 Effective June 1, 2000, no person shall install a vacuum assist Phase II vapor recovery system unless it has been certified by CARB to be compatible with ORVR.

302.12 Effective June 1, 2000, pseudo-spillage from any nozzle shall not exceed 5 ml. The quantity of pseudo-spillage shall be determined as prescribed in the Manual of Procedures, Volume IV, ST-41.

302.13 Effective June 1, 2000, spitting from any shall not exceed 5 ml. The quantity of pseudo-spillage shall be determined as prescribed in the Manual of Procedures, Volume IV, ST-41.

**8-7-303** **Topping Off:** A person shall not top off ~~motor vehicle~~ fuel tanks.

(Renumbered November 30, 1983)

**8-7-304** **Certification Requirements:** A person shall not offer for sale, sell or install within the District, any Phase I or Phase II vapor recovery equipment unless such equipment is CARB certified, meets the performance specifications required by the CARB certification procedures and this rule, and is installed in accordance with the most recent applicable CARB Executive Order.

(Amended and Renumbered 11/30/83; Amended 10/17/90)

**8-7-305** **Deleted October 17, 1990**

**8-7-306** **Prohibition of Use:** Whenever the APCO determines that a Phase II vapor recovery system, or any component thereof, contains a defect specified by CARB pursuant to Section 41960.2(c) of the Health and Safety Code, the APCO shall mark such system or component "Out of Order." No person shall use or permit the use of such marked component or system until it has been repaired, replaced, or adjusted, as necessary, and the APCO has reinspected it or has authorized its use pending reinspection.

**8-7-307** **Posting of Operating Instructions:** ~~The operator of~~ Each ~~retail~~ gasoline dispensing facility utilizing a Phase II system shall conspicuously post operating instructions ~~for the~~specific to the system in use in the gasoline dispensing area. The instructions shall clearly describe how to fuel vehicles correctly with the vapor recovery nozzles utilized, at the station, ~~,~~ The instructions shall also ~~and shall~~ include a warning that topping off is prohibited, and may result in spillage or recirculation of gasoline ~~and is prohibited~~. Additionally, the instructions shall include a prominent display of the District's or the CARB's toll free telephone number for complaints.

(Amended November 30, 1983)

**8-7-308** **Operating Practices:** Gasoline shall not be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation to the atmosphere. (Adopted November 30. 1983)

**8-7-309** **Contingent Vapor Recovery Requirements:** Facilities which are equipped with Phase II vapor recovery must also be equipped with Phase I vapor recovery.

(Adopted March 4, 1987; Amended October 17, 1990)

**8-7-310** ~~**New Tank Phase II Requirements:** All gasoline tanks with a capacity greater than 1.0 cubic meter (260 gallons) and installed after March 4, 1987, must be equipped with Phase I and II vapor recovery~~. (Adopted 3/4/87; Amended 10/17/90)

**8-7-311** **Exempt Tank Requirements:** Any tank with a capacity greater than ~~1.0~~ .95 cubic meter (~~260~~ 250 gallons) where Phase I vapor recovery equipment is not required must be equipped with a submerged fill pipe. ~~Above ground gasoline storage tanks shall be equipped with a pressure-vacuum relief valve which is set to either a pressure within 10% of the maximum allowable working pressure of the tank or at least 25.8 mm Hg (0.5 psig) pressure~~. (Adopted October 17, 1990)

**8-7-312** **Removal of Gasoline:** A person shall not transfer or allow the transfer of gasoline from stationary tanks into gasoline delivery vehicles unless a vapor recovery system that collects 95% of gasoline vapors is used. (Adopted October 17, 1990).

**8-7-313** **Requirements for New or Modified Phase II Installations:** Effective June 1, 2000 + 1 year), and at least six months after CARB has certified at least two systems, a person shall not install or modify a Phase II vapor recovery system unless all new equipment has been certified by CARB to meet the following emission limitations without any maintenance being performed for the 90 days prior to the certification test:

313.1 The total emissions of organic compounds from the nozzle/fill pipe interface, storage tank vent pipes, and pressure-related fugitives shall not exceed 0.7 pounds per 1000 gallons gasoline dispensed.

313.2 The emissions of organic compounds from spillage shall not exceed 0.42 pounds per 1000 gallons gasoline dispensed.

313.3 The emissions of organic compounds from pseudo-spillage shall not exceed 0.42 pounds per 1000 gallons gasoline dispensed.

**8-7-314** **Hold Open Latch Requirements:** A person shall not operate a nozzle that dispenses gasoline at a retail gasoline dispensing facility or a gasoline dispensing facility operated by the state or any county, city and county, or city unless the nozzle is equipped with an operating hold open latch. Any hold open latch determined to be inoperative may be repaired or replaced by the owner or operator within 48 hours of notification by the APCO or fire marshal without any fines or penalty action.

**8-7-315** **Pressure Vacuum Valve Requirements, Underground Storage Tanks:** No person shall operate an underground tank dispensing gasoline unless it is equipped with a CARB certified pressure vacuum (PV) valve on the vent pipe(s). The valve settings shall be three inches of water column plus or minus one-half inch on the pressure side and eight inches of water column plus or minus two inches on the vacuum side or as otherwise specified in the applicable CARB vapor recovery certification.

**8-7-316** **Pressure Vacuum Valve Requirements, Aboveground Storage Tanks and Vaulted Below-Grade Storage Tanks:** No person shall operate a stationary aboveground storage tank or vaulted below-grade storage tank dispensing gasoline unless it is equipped with a pressure vacuum (PV) valve on the vent pipe(s). The valve settings shall be either as specified in the applicable CARB vapor recovery certification or, for uncertified tanks, at least 90% of the tank's maximum allowable working pressure or 25.8 mm Hg (.5 psig).

**8-7-400 ADMINISTRATIVE REQUIREMENTS**

**8-7-401** **Equipment Installation and Modification:** A person shall not install or modify Phase I or Phase II gasoline vapor recovery equipment, exclusive of repair or replacement of like parts, unless an Authority to Construct has been obtained pursuant to Section 301 of Regulation 2, Rule 1. An Authority to Construct shall not be required for the replacement of existing hoses and/or nozzles, or for other repairs or replacements of like parts where the APCO determines that testing is not necessary to verify proper installation of the vapor recovery system. (Adopted November 30, 1983)

**8-7-402** **Deleted October 17, 1990**

**8-7-403** **Deleted March 4, 1987**

**8-7-404** **Certification of New Installations:** Any person who installs or modifies underground Phase II vapor recovery piping under an Authority to Construct shall provide written certification, where applicable pursuant to the California Health and Safety Code Section 41954, that the Phase II vapor recovery system meets the dynamic backpressure requirements. Certification shall be established by testing, as prescribed in the Manual of Procedures, Volume IV, ST-27.

(Adopted October 17, 1990) Section deleted

**8-7-405** **Compliance Schedule, Loss of Exemption:** Any person exempt from Phase II vapor recovery requirements before October 17, 1990, who operates a facility that exclusively

~~refuels vehicles which are not motor vehicles as defined by the California Vehicle Code shall comply with the following schedule:~~

~~405.1 By March 1, 1991, submit a petition to the APCO for exemption under Section 8-7-112 or an application for an Authority to Construct pursuant to Section 301 of Regulation 2, Rule 1.~~

~~405.2 By June 1, 1991, be in final compliance with this rule.~~

~~(Adopted October 17, 1990)~~ Section deleted

**8-7-406 Testing Requirements, New and Modified Installations:** No person shall operate new or modified gasoline dispensing equipment without complying with the testing and notification requirements of an Authority to Construct. Installations performed without obtaining an Authority to Construct shall perform applicable tests and submit results promptly as specified by the APCO.

**8-7-500 MONITORING AND RECORDS**

**8-7-501 Burden of Proof:** The burden of proof of eligibility for exemption from any section of this rule is on the applicant. Persons seeking such an exemption shall maintain adequate records and furnish them to the APCO upon request.(Adopted November 30, 1983)

**8-7-502 Right of Access:** Any facility subject to this rule shall maintain on site the means to provide access to any and all components as necessary to determine compliance with the provisions of this rule. Access shall be furnished to the APCO upon request.

(Adopted October 17, 1990)

**8-7-503 Record Keeping Requirements:**

503.1 All gasoline dispensing facilities shall maintain records of the quantity of gasoline dispensed from the storage tanks during the last 12 month period.

503.2 All gasoline dispensing facilities shall maintain maintenance records detailing the nature and the date of all maintenance activities during the last 12 month period.

503.3 All records shall be retained for 24 months and made available at the gasoline dispensing facility for inspection by the APCO.

**8-7-600 MANUAL OF PROCEDURES**

**8-7-601 Determination of Equipment In Compliance with Dynamic Backpressure Requirements ~~and Vapor Tight~~:** ~~The means of determining whether equipment is in compliance with dynamic backpressure requirements and vapor tight shall be evaluated as prescribed in the Manual of Procedures, Volume IV. ST-27 and ST-30.~~ Compliance with the dynamic back pressure standard shall be determined as prescribed in the Manual of Procedures, under the pertinent sections of, Volume IV, ST-27.

(Amended November 30, 1983; October 17, 1990)

**8-7-602 Determination of Equipment in Compliance with Vapor Tightness Requirements:** Compliance with the vapor tightness standards shall be determined as prescribed in the Manual of Procedures, Volume IV, ST-30 (underground storage tanks) or ST-38 (vaulted storage tanks).

**8-7-~~602~~603 Determination of Equipment in Compliance with Phase I Vapor Recovery Efficiency:** ~~Phase I Vapor Recovery Efficiency~~ Compliance with Section 301.2 shall be determined as prescribed in the Manual of Procedures, Volume IV, ST - 36. (Adopted October 17, 1990)

**8-7-604 Determination of Equipment in Compliance Liquid with Liquid Removal Requirements:** Compliance with Section 302.9 shall be determined as prescribed in the Manual of Procedures, Volume IV, ST-37.

**8-7-605 Determination of Equipment in Compliance Liquid with Air to Liquid Volume Ratio (A/L) Requirements:** Compliance with the air to liquid volume ratio requirements shall be determined as prescribed in the Manual of Procedures, Volume IV, ST-40 and/or ST-39.

**8-7-~~603~~606 Determination of Applicability**: To determine the applicability of this Rule, samples of gasoline shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 13. (Adopted October 17, 1990)